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**Regional Road Maintenance ESA Forum
4812 196th Street, Spanaway Washington 98387**

June 7, 2011

Municipal Stormwater Permit Comments
WA Department of Ecology
Water Quality Program
P.O. Box 47696
Olympia, WA 98504-7696

To Whom It May Concern:

The Regional Forum Permit Committee (RFPC) would like to thank the Department of Ecology for the opportunity to comment on the preliminary draft language for the Phase 1&2 Municipal Stormwater General Permits. The RFPC is a sub-group of the Regional Road Maintenance Forum which is comprised of agencies listed at the end of this letter. Members of the Regional Road Maintenance Forum are committed to environmentally sound maintenance practices which preserve and protect both surface and ground waters.

The RFPC is in agreement that new approaches to stormwater management be developed which allow hydrologic processes of infiltration, filtration, storage, evaporation and transpiration of stormwater. The RFPC also believes that any new stormwater management method such as Low Impact Development (LID) be carefully implemented and monitored during the life of the project to ensure that the desired outcomes are achieved and are done in a cost effective manner.

The RFPC has the following general comments on the preliminary draft permit language.

- Permeable pavements should not be used in the traveled way for motor vehicles until more information becomes available on life cycle and maintenance costs. There is very little peer reviewed literature which documents what the lifecycle and maintenance costs are for permeable pavements and until more studies are done which answer these questions, permeable pavements should be limited to low risk areas such as sidewalks, parking lots, bike paths and non-motorized trails. Across the nation municipalities have amassed financially stifling backlogs of deferred maintenance and preservation needs, particularly for road, bridge and storm water assets.

The objective of this permit is to improve and protect water quality and the RFPC believes that can only be accomplished with the implementation of proven and fiscally sustainable means and methods. Pavements in the traveled way are the single most valuable and expensive asset of the taxpayers. The small volume of data that is available suggests pervious pavements will have life-cycles that are significantly shorter than traditional Hot Mix Asphalt and Portland Cement Concrete pavements. Even in considering the most optimistic data available, the implications to interim and long term pavement preservation costs are extreme and would likely be insurmountable.

- There are numerous definitions in Appendix 1 of the Minimum Technical Requirements for New Development and Redevelopment which reference the 2012 Stormwater Management Manual for Western Washington. It is impossible to comment on definitions which reference something that does not exist. It is difficult to determine what effect these new definitions will have on maintenance activities without this document. In addition, many of the new definitions are difficult to understand and infer how they will be applied. The RFPC recommends that all new definitions that reference this manual be removed and revert back to the 2005 manual. It is also recommended that further time be given to agencies to work with Ecology to determine how the new definitions will be applied to maintenance activities which are exempt from the Clean Water Act.
- Ecology would like to see LID as the preferred and commonly used approach to site development (5 b iii of the Preliminary Draft Language document dated May 16, of 2011). The RFPC believes that this is an acceptable approach but it should be clearly understood that LID be used only where feasible processes of infiltration, filtration, storage, evaporation and transpiration of stormwater can be achieved but also protect public safety. LID should not be the only tool available to jurisdictions to manage stormwater runoff.
- Currently, permittees are dealing with budgetary issues and would like to focus their limited resources on practices that have proven track records. However, insufficient information is available regarding the long term maintenance and operation of LID facilities to ensure optimal performance. Without that knowledge, developers and permittees will be unable to identify, design and operate LID facilities appropriately. To close this data gap, the next permit should focus on pilot studies rather than changes in requirements. This permit does not discuss maintenance and it would be beneficial to have an individual on the Low Impact Development Technical Advisory Committee with a transportation maintenance and operations background.

Specific comments and suggestions to Appendix 1 – Minimum Technical Requirements for New Development and Redevelopment for the Phase 1 Stormwater Permit are included below:

Section 2 – Definitions Related to Minimum Requirements:

Page 2: Bioretention BMPs: Ecology is citing Volume V, Chapter 7, 2012. Comments cannot be made on a manual that does not exist. Further, a definition should be freestanding and not reference an entire manual.

Page 2: Converted Pervious Surface: How will this definition be applied for maintenance activities?

Page 3: Effective Impervious Surface: Impervious surfaces whose stormwater runoff is collected and redistributed below pavement are not considered effective if continuous runoff modeling indicates that all stormwater is infiltrated. Isn't the purpose of LID to infiltrate all stormwater onsite? Please explain how this is to be applied as it is contradictory.

Page 3: Erodible or Leachable Materials – Please define “process waste”.

Page 4: Low Impact Development (LID) – Delete “mimic pre-disturbed” add “allow” hydrologic processes of infiltration” If pre-disturbed is to be used, it needs to be clearly defined.

Page 4: LID BMPs: Definition should be consistent with above.

Page 4: LID Principles – Please delete this definition. NPDES permit should be geared towards stormwater management and not land use.

Page 5: Pervious Surface –Delete “A” add “Any” surface add “material”.

Page 5 – Rain Garden: Clearly state that this is not a flow control or Retention/Detention facility and that these facilities are not subject to a yearly inspection.

Page 6: Receiving Waters. Please remove the last sentence. If there is separation between ground water and the stormwater LID, there is no discharge to groundwater and the discharge is to soil. If the last sentence is not removed then any LID that directs infiltration towards groundwater would be waters of the state and not part of the MS4.

Page 6: Source Control BMP – Impossible to comment on something that references a manual that does not exist.

Page 7: Vehicular Use – Please explain how this will be used and why this is included: Is this the areas that LID may not be used? Recommend that this definition be deleted without further clarification.

Page 8: Section 3: General comment: Applicability of Minimum Requirements. This should be placed at the beginning of the document which is the common place format for regulatory documents. To determine if something is applicable, an applicant should not have to read eight pages into the document to see what is applicable.

Page 8: 3.1 Strike out new language – What effect will the new language have on road maintenance activities on an existing road?

Page 11: 3.2 – “Regardless of size” should be deleted. Should not need a Construction Stormwater Pollution Plan for small developments or developments that do not disturb soils.

Page 12: 3.3 - Leave “treatment” in second to last paragraph.

Page 12: 3.4 - Unrealistic to remove economic hardship clause. Recommend that this language remain in the document.

Page 13: 4.1 – Please delete additional language, retention of native vegetation may not always prove beneficial and could impede proper function of LID BMPs. Leaving small parts of a 25 year old Alder stand around or in a stormwater facility or in the open after being part of a system results in short term and long term problems and cost without a short or long term water quality benefit. Trying to remove hazardous trees in the built environment can cause more damage than removal and replanting at the time of development with the right tree for the space.

Page 19: 12: Protect Low Impact Development BMPs Add “during construction”: Please describe the protection BMPs in more detail. How is one to prevent foot traffic in rain gardens? This language implies that Low Impact BMPs may need to be fenced, which is impracticable.

Page 20: Section 4.5: Project Thresholds: This document consistently references the Volume V, 2012 manual and indicates that changes will be made not only in LID but other areas. It is impossible to comment on a manual that does not yet exist. Rain gardens and permeable pavement are not always feasible and other options for managing stormwater should be included.

Page 33: Section 8: Feasibility Criteria for Selected Low Impact Development Best Management Practices:

There is an extraordinary amount of time and cost for public and private owners to determine the feasibility of a site for LID. Several feasibility criteria pertain to exclusion zones from structures such as underground storage tanks, drinking water wells and septic systems. Complete, accurate and accessible databases do not exist for all of the features listed, leaving developers and permittees unable to confidently apply these criteria to proposed LID projects. The Department of Ecology recommendations should be clear and based on Ecology's best available information. The best information should be listed to exempt the need to study a known LID failure type.

Page 34/35: Road Type: Determining appropriate surfacing materials/designs requires analysis of site specific factors such as soil properties, drainage, and traffic loading. The calculations for this analysis require inputs including the life cycle, which, at present, is poorly understood for permeable pavements. Current road safety standards may not allow deviations from traditional road surfacing materials and traditional roadway design seeks to divert water away from the road structure, not infiltrate or convey water into the substrate beneath roads. Until studies show that it is safe to have water beneath the roadway, permeable pavements should be restricted to low risk environments such as Islands, Shoulders Parking Areas, Sidewalks, and Trails.

One major concern of road maintenance organizations is how to clean up spills of harmful substances that occur routinely on roads. Spilled substances are relatively easy to clean up from an enclosed drainage system or gravel shoulder. It is entirely unclear how agencies should or could respond if a spilled substance is allowed to percolate through the wear course and into the road substrate. It is not feasible to tear up the road every time there is a vehicle accident or lost load that results in a spill.

Lastly, there are also concerns how pervious roads will react to snow and ice activities and what effect studded tires will have on pavement life.

We look forward to working with Ecology and our Associations so that reasonable, cost effective LID regulations are achieved. This will help us all reach our shared goal of protection of the natural and built environment as currently defined in state regulations.

Department of Ecology
June 7, 2011
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Thank you for the opportunity to comment on the preliminary draft permit language.

Sincerely

Regional Road Maintenance Permit Committee

CC: Walt Olsen, County Road Advisory Board
Ashley Probart, Washington Association of Cities
Gary Rowe, Washington Association of Counties

Regional Road Maintenance ESA 4(d) Regional Forum Members:

City of Bellevue	King County	City of Poulsbo
City of Bremerton	Kitsap County	City of Renton
City of Burien	City of Lake Forest Park	City of Sammamish
Clallam County	City of Lakewood	City of Sea Tac
Clark County	City of Maple Valley	City of Shoreline
City of Covington	Mason County	Snohomish County
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City of Everett	City of Monroe	Thurston County
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